SNELLEN ORIGINAL TEST CHART
L0
L1
L2.5
L4
L6

SNELLEN ORIGINAL TEST CHART
L0
L1
L2.5
L4

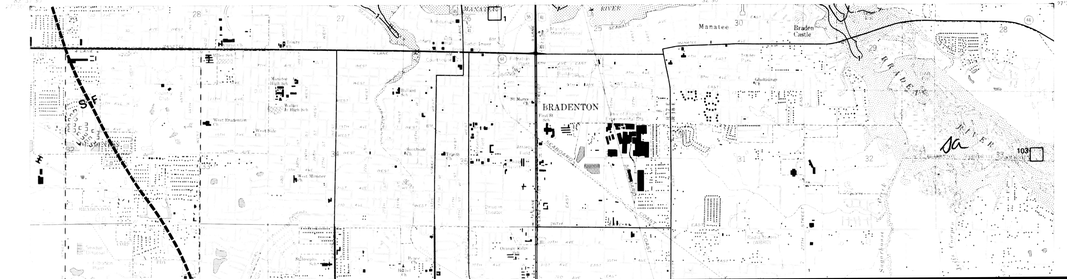
ORIGINAL

I 49.89/2:85(15)map B14

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF FLORIDA

BRADENTON QUADRANGLE
FLORIDA
7.5 MINUTE SERIES (TOPOGRAPHIC)

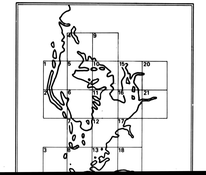


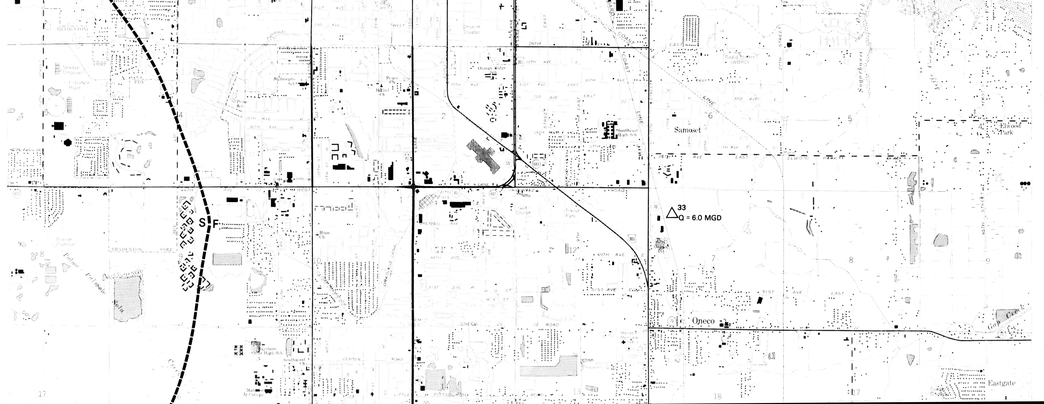
MAP B14

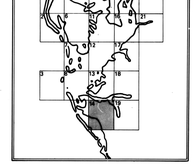
TAMPA BAY ENVIRONMENTAL ATLAS

WATER RESOURCES

BRADENTON







Scale 1:24,000

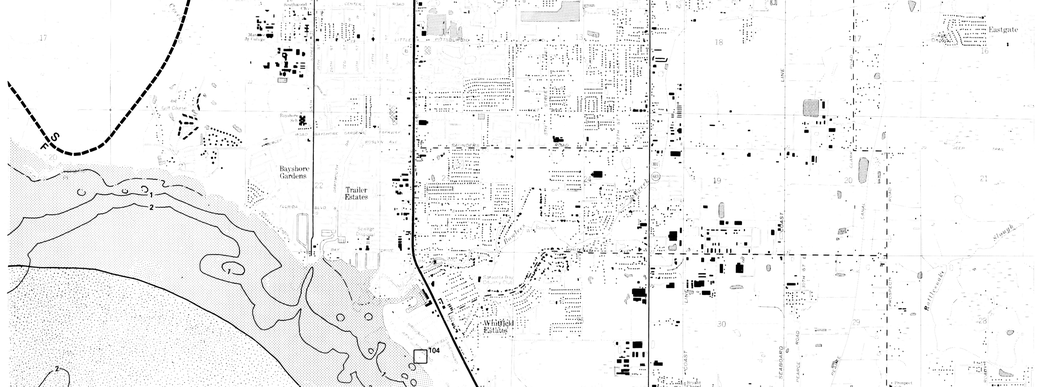
1984

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17 Universal Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There is no map A19 due to a lack of data.



latest available data obtained from Federal, State and Local government agencies and other sources.

There is no map A19 due to a lack of data.

LEGEND

MEAN ANNUAL MID-DEPTH SPECIFIC CONDUCTIVITY ISOPLETH (WATER QUALITY) CONTOUR MAP

Five year mean annual specific conductivity September 1978 - August 1983 (mmhos)

POINT SOURCE DISCHARGES *

Industrial Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or in millions of gallons per day (mgd).

Municipal Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or millions of gallons per day (mgd).

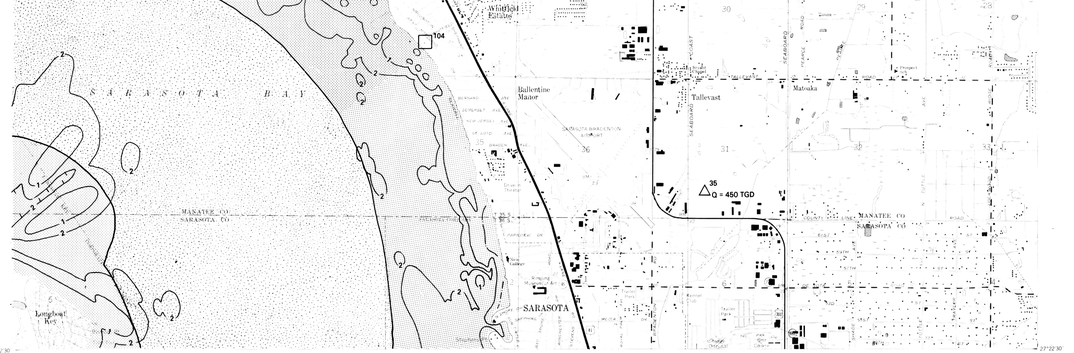
DREDGE SPOIL DISPOSAL SITES

TIDE STATION * (National Ocean Service)

Active tide station. The tide station number is listed next to the symbol.

Inactive tide station location. The tide station number is listed next to the symbol.

WATER QUALITY SAMPLING STATION * (Hillsborough County Environmental Protection Commission)
Five year seasonal means, Sept. 1978 - Aug. 1983



SCALE 1:24 000

0 1000 2000 3000 4000 5000 6000 7000 FEET

0 1 KILOMETER

THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, NATIONAL COASTAL ECOSYSTEMS TEAM.

N.O.S. TIDE STATIONS Index of tide stations for the state of Florida, National Ocean Service, Rockville, Md. 1981.

10 Inactive tide station location. The tide station number is listed next to the symbol.

10 **WATER QUALITY SAMPLING STATION** * (Hillsborough County Environmental Protection Commission) Five year seasonal means, Sept. 1978 - Aug. 1983

2 **BATHYMETRY** The contour interval is 2.0 meters with an initial 1.0 meter supplemental contour line added to better define shoals and inshore tidal flats.

INTERTIDAL ZONE This zone demarcates the area exposed and flooded by the tides and occurs between the line and the shore.

GENERALIZED SEDIMENT MAP

- Sand
- Shelly Sand
- Silty Sand
- Clayey Sand
- Sandy Clay
- Silt

NET TIDAL CURRENT Resultant tidal current. The direction is indicated by the arrow and the discharge range is feet per second

- 0.01 - 0.10 ft/sec
- 0.11 - 0.20 ft/sec
- 0.21 - 0.30 ft/sec
- 0.31 - 0.50 ft/sec
- >- 0.50 ft/sec

FRESHWATER/SALTWATER INTERFACE (U.S. Geological Survey 1979) 250 mg/l line of equal chloride concentration in the upper part of Floridan aquifer.

SCALE 1:24000

MILE 0 1000 2000 3000 4000 5000 6000 7000 FEET

KILOMETER 0 1 2 3 4 5

THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM. THE PURPOSE OF THE ATLAS IS TO PROVIDE RESOURCE MANAGERS AND THE GENERAL PUBLIC TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND SARASOTA, FLORIDA. THE ATLAS IS NOT INTENDED FOR USE IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION

SALINITY: Conductivity for Tampa Bay water quality sampling stations Sept. 1979 - August 1982, Hillsborough County Environmental Protection Commission.

POINT SOURCE DISCHARGES: Computer printout of industrial and municipal point source discharges in West Central Florida. Florida Dept. of Environmental Regulation,1983.

DREDGE SPOIL DISPOSAL AREAS: Dredge and Spoil easement location maps. Florida Dept. of Natural Resources

N.O.S. TIDE STATIONS: Index of tide stations for the state of Florida. National Ocean Service. Rockville, Md. 1981

WATER QUALITY: Total chlorophyll, conductivity, turbidity, and dissolved oxygen for Tampa Bay water quality sampling stations, Sept. 1979 - August 1983. Hillsborough County Environmental Protection Commission.

BATHYMETRIC: Bathymetric map to St. Petersburg Quadrangle. N.O.S. 1976

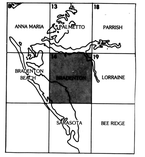
INTERTIDAL ZONE: Nautical Chart #'s 11410, 11413, 11414 and 11420. N.O.S., Rockville, Md. 1983.

SEDIMENTS: Sediments, oceanographic observations and pollution study of St. Petersburg Bay and adjacent waters. 1961-1965. Taylor and Saloman, 1968

TIDAL CURRENTS: Changes in tidal flow, circulation and flushing caused by dredge and fill in Tampa Bay, Florida. U.S. Geological Survey Open File Report 484-467. Goodwin, 1984

FRESHWATER-SALTWATER INTERFACE: Position of the Freshwater- Saltwater interface in the upper part of the Floridan aquifer, Southwest Florida. 1979 U.S.G.S. water resources open-file report 82-90. Causaseus and Fretwell, 1982.

FOR COMPLETE REFERENCE SEE MAP NARRATIVE



Note: Specific conductivity values on the supplemental legend should be in gm/cm.

0.31 - 0.50 ft/sec

>= 0.50 ft/sec

FRESHWATER/SALTWATER INTERFACE

(U.S. Geological Survey 1979)
250 mg/l line of equal chloride concentration in the upper part of Floridan aquifer.

Symbols appearing with numbers are described more fully in the narrative

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